Math B.S. OPTION I: Applied Mathematics Option

(2016-2017 and 2017-2018 catalogue years)

Student_____ CIN_____ADVISOR_____

GE Requirements (39-42 units)	Term	Grade	Course Type
Block A: Basic Subjects (9)			
A1 Oral Communication Course =			
A2 Written Communication Course =			
A3 Critical Thinking & composition Course =			
American Institutions (6)			
US History course =			
US Constitution course =			
Block B: Natural Sciences (0)			
Fulfilled by major requirements			
Block C: Arts and Humanities (6)			
C1 Arts Course =			
C2 Humanities Course =			
Block D: Social Sciences (6)			
D1 Course =			
D2 Course =			
Block E: Lifelong Learning and Self Development (3)			
E Course =			
Block F: Upper Division GE from 3 different sub-blocks (9)			
Sub block B Course =			
Sub block C Course =			
Sub block D Course =			
GWAR Requirements (0-3)			
UNIV 400 Writing Proficiency Exam (0) **OR** UNIV 401 Writing Proficiency (3)			

VARIOUS GE REQUIREMENTS

1. Two civic learning courses (denoted by **cl**) with one being an UD course
2. One race/ethnicity course (denoted by **re**) AND one diversity (denoted by **d**) course or another **re** course.
3. One writing intensive course (denoted by **WI**).

Above requirements must be fulfilled in GE blocks. Choose accordingly. An IHE course is required of all first-time freshmen. Please see e-catalog for complete GE requirement rules and policies.

***RELATED AREA ELECTIVES**

If you took CS 2012 for the Group IV required course, then select 7 units of Related Area Elective courses from approved list.

If you took PHYS 2200, BIOL 1200, or CHEM 1100 for the Group IV required course, then select 5 units of Related Area Elective courses from approved list.

The approved list of ALL electives can be obtained at the math dept. website.

Major Requirement (81 Units)	Term	Grade
Lower Division Required Courses (33)		
MATH 2170 (3) or CS 2011 (3)		
MATH 2110 Calculus I (4)		
MATH 2120 Calculus II (4)		
MATH 2130 Calculus III (3)		
MATH 2150 Differential Equations (3)		
MATH 2450 Foundations of Mathematics I (3)		
MATH 2550 Introduction to Linear Algebra (3)		
PHYS 2100 General Physics I (5)		
BIOL 1100 - Principles of Biology I (5)		
Upper Division Required Courses (7)		
MATH 3450 Foundations of Mathematics II (4)		
MATH 4650 Analysis I (3)		
Option Specific Required Courses (25-27)		
MATH 4570 - Linear Algebra (3)		
MATH 4680 Introduction to Complex Analysis (3)		
MATH 4740 Theory of Probability (3)		
MATH 4900 - Senior Seminar in Mathematics (4) *WI course*		
Select one from each of the following groups (12-14)		
Group I: MATH 4010 - Ordinary Differential Equations (3) MATH 4030 - Partial Differential Equations (3)		
Group II: MATH 4100 - Vector Analysis (3) MATH 4670 - Multivariate Analysis (3)		
Group III: MATH 4700 - Numerical Analysis I (3) MATH 4720 - Linear Programming (3)		
Group IV: PHYS 2200 General Physics II (5) BIOL 1200 Principles of Biology II (5) CHEM 1100 - General Chemistry I (5) CS 2012 – Introduction to Programming II (3)		
Related Area Electives* (5-7)		
Course1 =		
Course2 =		
Upper Division Electives (9)		
Course1 =		
Course2 =		
Course3 =		

Important Note: Minimum **40** units of upper division courses AND **120** total units are required for graduation.

GRADUATION REQUIREMENTS

For an extensive list of other graduation requirements, check "academic requirements" in your GET account.